

REMARKS

Claims 1-21 are now pending. Claims 1, 3-7, and 10-18 are amended and claims 20-21 are allowed.

Claim Objection of claims 1, 7, and 14 for Informality

Applicants have corrected the grammatical errors pointed out by the Examiner with respect to claims 1, 7 and 14.

Rejection of Claims 1-2, 7-9, 16 and 19 Under 35 U.S.C. § 102(b)

The Office Action has rejected claims 1-2, 7-9, 16 and 19 Under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,483,188 to Frodsham.

Claims 1-2

Claim 1, as amended, recites a switched current steering having an actual switch coupled to an actual output node and a dummy switch coupled to a dummy node.

For example, referring, e.g., to FIGS. 1 and 2 and paragraphs 17 and 18 of the present application, the switched current steering device 100 shows at least one actual switch 130 coupled to an actual output node and at least one dummy switch 150 coupled to a dummy node. Consequently, as the dummy switch transitions from state to state, the signal at the actual output node is unaffected.

In contrast, referring, e.g., to Frodsham's FIG. 6, Frodsham teaches a driving circuit that has a plurality of switches 240, 242, and 244 coupled to the same node 246.

Claims 3-6

The Applicants' undersigned attorney has rewritten these claims in independent form to overcome the Examiner's objections thereto.

Claims 7-9

Claim 7 as amended is allowable for similar reasons as to why claim 1 is

allowable.

Claims 10-15

The Applicants' undersigned attorney has rewritten these claims in independent form to overcome the Examiner's objections thereto.

Claims 16-19

Claim 16, as amended, recites transitioning actual switches in response to an input signal sequence and transitioning the dummy switches in response to a dummy signal sequence such that the number of actual switch state transitions plus the number of dummy switch state transitions is constant independent of the input signal sequence.

For example, referring e.g., to FIG. 2 and paragraphs 17-23, the actual and dummy switch drivers 120 and 140 maintain the sum of actual switch state transitions and dummy switch state transitions for each cycle at a constant number regardless of the state of the input bits D. This is because for any given pair of switches (one dummy 150 and one actual 130) one or the other transitions. More specifically, if the input signal changes such that an associated actual switch 130 is required to be switched, then the corresponding dummy switch 150 will not switch. Conversely, if the input signal changes (or does not change) such that the associated actual switch is not required to change, the corresponding dummy switch 150 does switch. As such, throughout operation, the number of transitions remains constant independent of the changes in the input signal.

Conversely, referring, e.g., to FIG. 5, Frodsham teaches a driving circuit that has a plurality of switches 240, 242, and 244, which all transition when the input signal transitions from logic 0 to logic 1 or vice versa, but that do not transition when the input signal does not transition. Consequently, because the total number of switch transitions depends on the input signal (three switch transitions when the input signal

changes, zero switch transitions when the input signal does not change), the total number of switch transitions is dependent on, not independent of, the input signal.

CONCLUSION

In light of the foregoing and in addition to allowed claims 20-21, claims 1, 3-7, and 10-18 as amended and claims 2, 8-9, and 19 as previously pending are in condition for allowance, and that action is respectfully requested.

In the event an additional fee is due for this Response, you are hereby authorized to charge such payment to Deposit Account No. 07-1897.

Respectfully submitted,

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